The opinion in support of the decision being entered today was not written
for publication and is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HERBERT MAGERSTEDT, GEORG HEGER, KARSTEN-JOSEF IDEL
and PAUL FRIEDEMANN

Appeal No. 1998-1891
Application No. 08/681,613

ON BRIEF

Before JOHN D. SMITH, LIEBERMAN, and TIMM, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 9, 10 and 14 which are all the claims pending in this application.

THE INVENTION

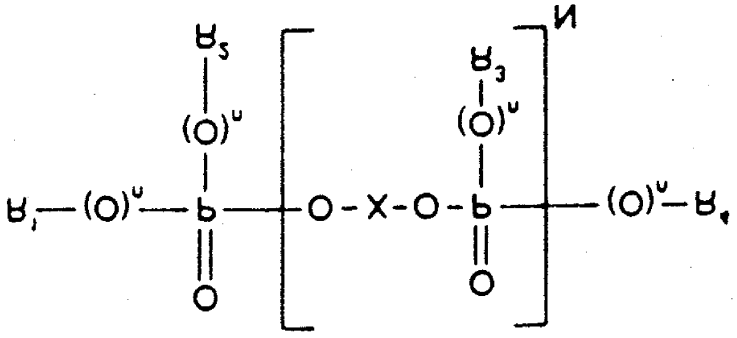
The invention is directed to a thermoplastic molding composition "consisting of" polyalkylene terephthalate, an oligomeric phosphorous compound having a specific formula alone or in combination with a second oligomeric phosphorous compound having a different structure than the first phosphorous compound. The composition additionally consists of a specified amount of magnesium calcium carbonate hydrate. Other features of the claimed subject matter are set forth the following illustrative claim.

THE CLAIMS

Claims 14 is illustrative of appellants' invention and is reproduced below.

14. Thermoplastic moulding compounds consisting of:

A) 30 to 98.9 parts by wt. of polyalkyleneterephthalate:
C) 0 to 30 parts by wt. of a graft polymer;



(Ig)

D) 0.1 to 20 parts by wt. of an oligomeric phophorus compound of the formula (Ia)

in which

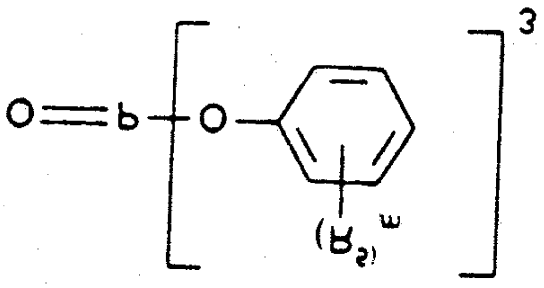
R^1, R^2, R^3, R^4, independently of each other, represent a C_1-C_8-alkyl, C_5-C_6-cycloalkyl, C_6-C_{10}-aryl or C_7-C_{12}-aralkyl group,

n **may be 0 or 1, irrespective of the position,**

N **is an average number from 0.5 to 5 and**

X **represents a mono or polynuclear aromatic group with 6 to 30 carbon atoms,**

or 0.1 to 20 parts by weight of a mixture of an oligomeric phosphorus compound of the formula (Ia) and a phosphorus compound of the formula (Ib)



(Ip)

R^5 **is methyl and**

m **is a number of 0 to 5,**

where the amount of phosphorus compound of the formula (Ib) in the mixture of phosphorus compounds is 1 to 50% by weight, relative to 100% by weight of phosphorus compound of the formulae (Ia) and (Ib);

E1) 1 to 60 parts by wt. of magnesium calcium carbonate hydrate;
E2) 0 to 30 parts by wt. of fillers and reinforcing materials selected from the group consisting of glass fibers, glass beads, mica, silicates, quartz, talc, titanium dioxide and wollastonite

and optionally one or more of lubricants, mold release agents, nucleating agents, antistatic agents, stabilizers, colorants or pigments.

THE REFERENCES OF RECORD

As evidence of obviousness, the examiner relies upon the following references.

Gareiss	5,298,647	Mar, 29, 1994
De Wit et al. (WO'314) (European Patent Application)	WO92/11314	July 9, 1992

Arthur and Elizabeth Rose "The condensed chemical dictionary," 6th ed., Reinhold Publishing, p. 690 (August, 1961).

THE REJECTION

Claims 9, 10 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over WO'314 in view of Gareiss.

OPINION

We have carefully considered all of the arguments advanced by appellants and the examiner and agree with the appellant that the aforementioned rejection is not well founded. Accordingly, we reverse.

The § 103 Rejection

"[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a ***prima facie*** case of unpatentability," whether on the grounds of anticipation or obviousness. ***In re Oetiker***, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). On the record before us, the examiner relies upon a combination of two references to reject the claimed subject matter and establish a ***prima facie*** case of obviousness. The basic premise of the rejection is that it would have been obvious to one of ordinary skill in the art that, "[e]limination of the flame-out time reducing polymer and its function in the compositions taught by WO'314 would have been obvious to one of ordinary skill in the art." See Answer, page 3. It is further the examiner's position that, "it would have been obvious to include magnesium calcium carbonate hydrate in the compositions taught by WO'314 in order to obtain further improvements in mechanical and flame retardant properties." Id. We disagree.

We find that WO'314 discloses a composition comprising a blend of polybutylene terephthalate and an aromatic carbonate or a blend of a polybutylene terephthalate and a polyetherimide. See page 2, lines 6-10. The polymer blend is combined with at least one flame retardant agent exemplified by tetraphenyl resorcinol diphosphate. See page 3, lines 6-8 and the examples. We further find that WO'314 discloses that additives may be present including fillers, pigments and further flame retarding agents. See page 3, line 25-31.

Table A of WO'314, however, discloses that a composition comprising PBT (polybutylene terephthalate), PC, (aromatic polycarbonate), hindered phenol and RDP

(resorcinol diphosphate) has a flame out time in seconds of less than half that obtained when polycarbonate is omitted from the composition. Moreover, the essence of the inventive subject matter described by WO'314 is that, "[i]t has now surprisingly been found that the addition of some of the above-mentioned polymers, i.e., aromatic polycarbonates and polyetherimides improve the so-called flame-out time, whereas others, i.e., polyphenylene oxides do increase the flame-out time." See page 2. Accordingly, it is not seen why one of ordinary skill in the art would have been motivated to remove the aromatic polycarbonate from the composition disclosed by WO'314.

In addition, we find that Gareiss requires a combination of magnesium carbonate and magnesium calcium carbonate hydrate as a flame retardant composition for a thermoplastic molding composition comprising a thermoplastic polyester. See column 1, lines 7-12, 45-48, column 2, lines 35-57, column 8, lines 4-6 and the examples. In our view, the disclosure of WO'314 alone or with Gareiss fails to provide any rationale or suggestion for the exclusion of one flame retarding material, i.e., aromatic polycarbonate, while at the same time adding a second flame retarding agent, i.e., magnesium calcium carbonate hydrate.

Based upon the above analysis, we conclude that there is no suggestion or teaching for eliminating the polycarbonate flame retardant of WO'314 and replacing it with the flame retardant of Gareiss.

The examiner must show reasons that the skilled artisan confronted with the same problems as the inventor and with no knowledge of the claimed invention would select the elements from the cited prior art references for combination in the manner claimed. We determine that there is no reason,

suggestion, or motivation to combine the references in the manner proposed by the examiner. Accordingly, the examiner has not established a ***prima facie*** case of obviousness and the examiner's rejection of claims 1 through 12 under 35 U.S.C. § 103 is not sustained. ***In re Rouffet***, 149 F.3d 1350, 1355,

47 USPQ2d 1453, 1455 (Fed. Cir. 1998).

The decision of the examiner is reversed.

DECISION

The rejection of claims 9, 10 and 14 under 35 U.S.C. § 103 as being unpatentable over WO'314 in view of Gareiss is reversed.

REVERSED

JOHN D. SMITH Administrative Patent Judge	)	
PAUL LIEBERMAN Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
CATHERINE TIMM Administrative Patent Judge	)	

lp

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Application No. 08/681,613

APJ LIEBERMAN

APJ TIMM

APJ JOHN D. SMITH

DECISION: REVERSED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):

Prepared: August 30, 2001